**Recording Sheet for Chemistry 1.1 90930 Template**

Name:

Achievement Standard Chemistry 90930: Carry out a practical chemistry investigation, with direction

Credits: 4

| Achievement | Achievement with Merit | Achievement with Excellence |
| --- | --- | --- |
| Carry out a practical chemistry investigation, with direction. | Carry out an in-depth practical chemistry investigation, with direction. | Carry out a comprehensive practical chemistry investigation, with direction. |

**Aim**

The purpose of this experiment is to determine how the concentration of hydrochloric acid affects the reaction rate with Magnesium metal.

**Hypothesis**

**Method**

**Changes to Method**

Change Reason

**Data**

Trial 1 Trial 2

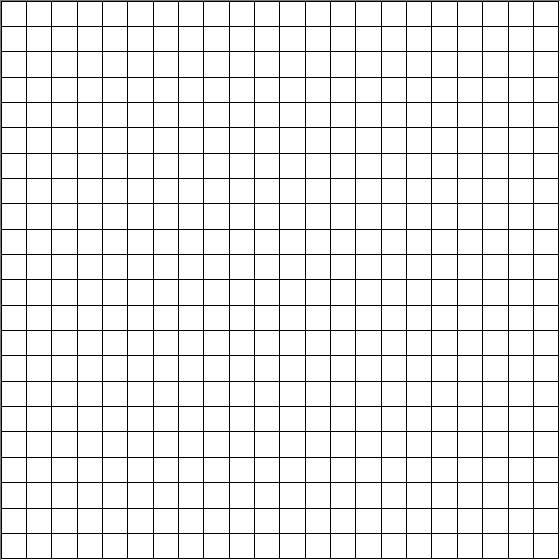
|  |  |  |  |
| --- | --- | --- | --- |
| **Acid Concentration (M)** | **Time (min:sec)** | **Acid Concentration (M)** | **Time (min:sec)** |
| 0.2 |  | 0.2 |  |
| 0.4 |  | 0.4 |  |
| 0.8 |  | 0.8 |  |
| 1.6 |  | 1.6 |  |
| 3.2 |  | 3.2 |  |

Trial 3 Average

|  |  |  |  |
| --- | --- | --- | --- |
| **Acid Concentration (M)** | **Time (min:sec)** | **Acid Concentration (M)** | **Time (min:sec)** |
| 0.2 |  | 0.2 |  |
| 0.4 |  | 0.4 |  |
| 0.8 |  | 0.8 |  |
| 1.6 |  | 1.6 |  |
| 3.2 |  | 3.2 |  |

**Graph**

**Title:**



**Analysis**

* **What** did your results show?
* **Describe** how the reaction occurs using particle theory (what you would see under a microscope).
* **Why** do you think the concentration of acid affects the speed of the reaction? How can you tell this from your graph?
* **How** do you know your results can be trusted?
* **How** was your experiment a fair test?

**Conclusion**

* Describe your findings.
* Was your hypothesis correct?
* Why do you think your hypothesis was correct or incorrect?
* How could you have improved your experiment to make it more accurate?